

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012702**Date Inspected:** 15-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:** **Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:** **Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:** **Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:** **Yes No N/A****Delayed / Cancelled:** **Yes No N/A****Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 5AW (Traveler Brackets)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Traveler Rail Brackets to Side Panel and Side Panel to the Floor Beam at Panel Point (PP) 29, PP 30 and PP 31 for Segment 5AW. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00283 Dated March 15, 2010.

Bolt sizes used were M20 x 85 RC Set# DHGM200003 and final torque required was 346 N-m,

Bolt sizes used were M20 x 95 RC Set# DHGM200018 and final torque required was 347 N-m,

Bolt sizes used were M20 x 160 RC Set# DHGM200006 and final torque required was 340 N-m,

Bolt sizes used were M22 x 90 RC Set# DHGM220048 and final torque required was 500 N-m and

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Bolt sizes used were M22 x 120 RC Set# DHGM220051 and final torque required was 433 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-578.

Segment 5BW (Traveler Brackets)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Traveler Rail Brackets to Side Panel and Side Panel to the Floor Beam at Panel Point (PP) 32, PP 33 and PP 34 for Segment 5BW. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00283 Dated March 15, 2010.

Bolt sizes used were M20 x 85 RC Set# DHGM200003 and final torque required was 346 N-m,

Bolt sizes used were M20 x 95 RC Set# DHGM200018 and final torque required was 347 N-m,

Bolt sizes used were M20 x 160 RC Set# DHGM200006 and final torque required was 340 N-m,

Bolt sizes used were M22 x 90 RC Set# DHGM220048 and final torque required was 500 N-m and

Bolt sizes used were M22 x 120 RC Set# DHGM220051 and final torque required was 433 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-578.

Segment 5CW (Traveler Brackets)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Traveler Rail Brackets to Side Panel and Side Panel to the Floor Beam at Panel Point (PP) 35 and PP 36 for Segment 5CW. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00283 Dated March 15, 2010.

Bolt sizes used were M20 x 85 RC Set# DHGM200003 and final torque required was 346 N-m,

Bolt sizes used were M20 x 95 RC Set# DHGM200018 and final torque required was 347 N-m,

Bolt sizes used were M20 x 160 RC Set# DHGM200006 and final torque required was 340 N-m,

Bolt sizes used were M22 x 90 RC Set# DHGM220048 and final torque required was 500 N-m and

Bolt sizes used were M22 x 120 RC Set# DHGM220051 and final torque required was 433 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-578.

General Note: Please refer the pictures attached below for Traveler Rail Brackets for more comprehensive detail.

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Cross Beam 4 (Cat Walk)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts Installed at CB4. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00282 Dated March 15, 2010.

Bolt sizes used were M16 x 40 RC Set# DHGM160019 and final torque required was 200 N-m and

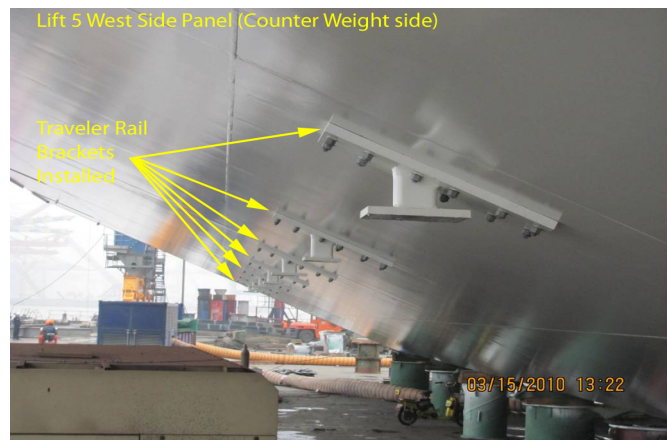
Bolt sizes used were M16 x 50 RC Set# DHGM160011 and final torque required was 200 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Lift 5 East

This Quality Assurance (QA) Inspector noticed that Lift 5 East was lifted from the Heavy Dock Area to ZPMC Ship Zhenhua #17.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath
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Quality Assurance Inspector

Reviewed By:	Miller,Mark
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QA Reviewer
